

ABSTRACT OF THE DISCLOSURE

The virtual supercomputer is an apparatus, system and method for generating information processing solutions to complex and/or high-demand/high-performance computing problems, without the need for costly, dedicated hardware supercomputers, and in a manner far more efficient than simple grid or multiprocessor network approaches. The virtual supercomputer consists of a reconfigurable virtual hardware processor, an associated operating system, and a set of operations and procedures that allow the architecture of the system to be easily tailored and adapted to specific problems or classes of problems in a way that such tailored solutions will perform on a variety of hardware architectures, while retaining the benefits of a tailored solution that is designed to exploit the specific and often changing information processing features and demands of the problem at hand.